

# Ian Gallagher

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iangallagherm  
iangallagherm



## Education

2017–2021 **B.S. Mathematics**, *Cal Poly*, San Luis Obispo, 3.9 GPA  
Graduated Summa Cum Laude along with a computer science minor.  
Attended Simple Group, a research seminar with a focus on algebraic topics.  
Graduate courses in Field Theory, Algebra, and Real Analysis.

## Experience

July 2021–  
May 2023 **Software Engineering Consultant**, *Pariveda Solutions*, San Francisco  
Built, tested, and deployed new features for next generation customer support platform of a major online hospitality marketplace.  
Tasked with improvements to backend service infrastructure and increasing observability and alerting of systems.  
Made optimizations to reduce request latency by 20% and request volume by more than 50% for core customer support data.

2019–2021 **Software Team Member**, *Cal Poly CubeSat Laboratory*  
Software Lead for NASA ER-2 payload designed to record plane's in-flight vibrational profile and interface with custom XCube CPCL payload carrier.  
Refactored and updated existing microcontroller analog to digital converter sampling pipeline. Designed for embedded Linux platforms. Languages Used: C, Python.

Summer 2020 **Frost Research Scholar**, *Cal Poly Mathematics Department*  
Member of pure mathematics student research team lead by Dr. Eric Brussel.  
Generalized results about the structure of the quaternions to a generalization of the quaternions.  
Classified the embedded commutative sub-algebras, their conjugacy classes, and associated moduli spaces.

Summer 2019 **Frost Research Scholar**, *Cal Poly Mathematics Department*  
Implemented theoretical climate models from research papers in Matlab.  
Utilized shell scripts to parallelize runs of model over a wide array of input parameters.  
Created visuals and statistical tests to investigate link between internal model behavior and external forcing signals.

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## Technical Skills

Languages Java, Kotlin, Ruby, Python, C, Matlab, JavaScript, TypeScript  
Frameworks React, GraphQL, REST  
Tools Linux, Bash, Git, Docker, Kubernetes, Buildkite, Datadog,  $\LaTeX$

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## Awards & Certifications

- 2021–2024 **Solutions Architect – Associate**, *Amazon Web Services*  
Demonstrated the ability to build secure and robust solutions using architectural design principles.
- 2021 **Robert P. Balles Most Outstanding Senior**, *Cal Poly Mathematics Department*  
One of two students selected on the basis of participation in clubs or societies, contribution to the image of the department, and scholastic achievement.
- 2020 **Accenture Outstanding Junior of the Year**, *Cal Poly Mathematics Department*  
Awarded to a single junior in the mathematics major for demonstrating superior leadership skills and the ability to work effectively with peers and faculty.
- 2019, 2020 **Edward Van Duyne Memorial Scholarship**, *Cal Poly Mathematics Department*  
Two time recipient of scholarship intended for high-achieving students in the mathematics major.